



4001-1154

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Manfred SCHUSTER

Confirmation No. Unknown

Serial No. 10/673,170

Group Unknown

Filed September 30, 2003

Examiner Unassigned

PHASE CONTRAST X-RAY DEVICE FOR CREATING A PHASE CONTRAST
IMAGE OF AN OBJECT AND METHOD FOR CREATING THE PHASE CONTRAST
IMAGE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In compliance with Rules 1.97 and 1.98, and in fulfillment of the duty of disclosure under Rule 1.56, the cited documents are made of record on the enclosed PTO Form-1449.

As the USPTO has waived the requirement under 37 CFR 1.98(a)(2)(i) for submitting a copy of each cited U.S. patent and patent publication for applications filed after June 30, 2003, copies of the cited U.S. references are not enclosed, as the present application is filed after June 30, 2003. Copies of the cited foreign patent documents and/or non-patent literature are enclosed.

A concise explanation of the relevance of these items is that these references were discovered during any


searches our client or their client had made, or that they were considered in the preparation of the application.

Document 3 describes the known phenomenas of diffraction and interference. Document 7 gives an overview concerning a special kind of a source of x-rays. The mechanism of this source is called channeling.

Respectfully submitted,

YOUNG & THOMPSON

By



Robert J. Patch
Attorney for Applicant
Registration No. 17,355
745 South 23rd Street
Arlington, VA 22202
Telephone: 703/521-2297

December 29, 2003

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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
4001-1154

SERIAL NO.
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use several sheets if necessary)

37 CFR 1.98(b)

APPLICANT
Manfred SCHUSTER

FILING DATED
September 30, 2003

GROUP
Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

DOCUMENT NO.	PUBL. DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

1	S.W. Wilkins et al., "Phase-Contrast Imaging Using Polychromatic Hard X-Rays," Nature, V. 384, 1996, pp. 335-338.
2	M. Schuster et al., "Laterally Graded Multilayer Optics for X-Ray Analysis," Proc. SPIE, V. 3767, 1999, pp. 183-198.
3	F.S. Crawford, Jr., "Schwingungen und Wellen," Vieweg, Braunschweig, 1989, pp. 259-271.
4	L.M.N. Távorá et al., "Optimisation of Transmission Target X-Ray Tubes for Imaging Applications using Monte Carlo Based Methods," SPIE, V. 3771, 1999, pp. 61-71.
5	M.A. Piestrup et al., "A Design of Mammography Units Using a Quasimonochromatic X-Ray Source," Review of Scientific Instruments, V. 72, 2001, pp. 2159-2170.
6	V.G. Baryshevsky et al., "A Comparative Analysis of Various Mechanisms for the Generation of X-Rays by Relativistic Particles," Nuclear Instruments and Methods in Physics Research, V. 228, 1985, pp. 490-495.
7	Wolfgang Knüpfer et al., "Channelingstrahlung," Physik in unserer Zeit, V. 6, 1984, pp. 163-172.
8	Akira Tsunemi et al., "Backward Compton Scattering of Picosecond CO ₂ Laser Pulses Using Relativistic Electron Beam for the Bright X-Ray Generation," IEEE, V. 3, 1999, pp. 926-927.
9	Akira Tsunemi et al., "Ultra-Bright X-Ray Generation using Inverse Compton Scattering of Picosecond CO ₂ Laser Pulses," IEEE, V. 4, 1999, pp. 2552-2554.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.